

MONTHLY WEATHER REVIEW,

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WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

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INTRODUCTION.

In compiling the present Review the following data received up to March 14th, have been made use of viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at one hundred and twenty-eight Signal Service stations and twelve Canadian stations: monthly journals and means from one hundred and thirty-eight of the former, and means from fourteen of the latter; two hundred and fifty-nine reports from voluntary observers; thirty-six monthly reports from United States Army Post Surgeons; Marine records; International Simultaneous Reports; Monthly Reports of the Weather Services of the States of Iowa and Missouri; reliable newspaper extracts and special reports. The most interesting features of the month have been, 1st: The general deficiency in pressure, which has been the most marked in Washington Territory, Oregon, the Gulf and South Atlantic States. 2nd, The continued high temperatures in the Upper Mississippi and Lower Missouri valleys. 3rd, The large number of low areas traced from the Pacific. 4th, The severe storm of the 20th, 21st, 22nd and 23rd, (No. XI). 5th, The general deficiency in precipitation east of the Rocky Mountains, and excessive rain-falls on the Pacific coast, and consequent destructive floods. 6th, The remarkable measured wind-velocity of 150 miles per hour at Mt. Washington. 7th, The tornadoes from the 7th to the 9th. 8th, The severe thunder-storms of the 20th. 9th, The forward state of vegetation in the Western States.

BAROMETRIC PRESSURE.

In General.—The general distribution of atmospheric pressure is shown by the isobars on chart No. II. A comparison with the means for former years show that the pressures have been, in general, below the normal, and that this deficiency is very marked on the North Pacific slope and in the Gulf and South Atlantic States. In Oregon there is a deficiency of 25 hundredths of an inch, and in the latter two districts of 12 to 15 hundredths of an inch.

Barometric Ranges.—The largest and smallest ranges have been respectively as follows: California—Red Bluff, 1.01; Los Angeles, 0.75. Rocky Mountains—Denver, 0.82; Pike's Peak, 0.60. Northwest—Yankton, 1.19; Deadwood, 0.82. The Southwest—Concho, 1.41; Stockton, 0.74. Upper Mississippi Valley—St. Louis, 1.31; Dubuque, 1.08. Upper Lakes—Chicago, 1.17; Marquette, 0.90; Lower Lakes—Detroit and Toledo, 1.16; Oswego, 0.94; Ohio valley and Tennessee—Cairo, 1.33; Knoxville, 1.03. East Gulf States—Vicksburg, 1.12; St. Marks, 0.73. South Atlantic States—Augusta, 0.83; Jacksonville, 0.68. Middle Atlantic States,—Ft. Whipple, 1.03; Cape May, 0.89. New England—Eastport, 1.26; Burlington, 0.86.

Areas of High Barometer in General.—These have been unimportant, furnishing a great contrast to the conditions for February of former years. The consequent absence of cold northerly gales has given the country generally a month of remarkably mild weather, especially in the Upper Mississippi and Lower Missouri valleys.

No. I.—On morning of 1st this area of high pressure covered a small section of the Northwest, evidently advancing from Manitoba. At midnight of 1st it was central at Pembina, barometer, 30.43, (0.30 above normal,) clear, cool weather, calms or light winds. On morning of 2d, accompanied by marked fall of temperature, the ridge of high pressure spreading eastward has extended its limits from Dakota to St. Lawrence valley, being central at Escanaba, barometer, 30.42, (0.40 above normal.) During 2d, clear weather, with calms or light northerly winds, prevailed from Minnesota to New York. On morning of 3rd the central